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ABSTRACT

Differences between black and white undergraduate student backgrounds and perceptions concerning a predominantly white university prior to college entrance, while enrolled, and within one year after receipt of a baccalaureate degree were examined. Data were collected between 1978 and 1980 from students at the University of North Carolina at Greensboro, which has 70 percent female enrollment. Research measures included the Student Descriptive Questionnaire developed by the Educational Testing Service and the Student Perceptions Survey, which incorporates items from the Higher Education Measurement and Evaluation Kit and from a survey of black students enrolled in white colleges and universities, which was sponsored by the Southern Regional Education Board. A major difference that was found between black and white students' college experiences, was the need for financial assistance on the part of most black students. Another difference, which was consistant across the three time periods, was the academic aptitude and achievement of the students. Black students generally scored lower on the Scholastic Aptitude Test and saw themselves as deficient and in need of improving their math abilities. This difference in academic aptitude and achievement remained throughout the college years as evidenced by the difference in the grade point average for graduating seniors. The third major difference was related to students' social interests and activities. Blacks were much more interested than whites in participating in student government and activities of special ethnic or racial clubs, such as the Neo-Black Society. It is suggested that the findings illustrate the need for a supportive environment for minority students. A bibliography is appended. (SW)

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A Comparison of Black and White Student Backgrounds and Perceptions of a Predominantly White Campus Environment: Implications for Institutional Research and Program Development

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THE ASSOCIATION FOR INSTITUTIONAL RESEARCH

This paper was presented at the Twenty-First Annual Forum of the Association for Institutional Research held at the Leamington Hotel in Minneapolis, Minnesota, May 17-20, 1981. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Mary Corcoran
University of Minnesota
(Editor, AIR Forum Publications)

ABSTRACT

This study examines differences between black and white undergraduate student backgrounds and perceptions of a predominantly white university prior to entry, while students are enrolled, and within one year after receipt of a baccalaureate degree. Eighteen discriminant analyses were employed in the analysis of the data which were collected in the period 1978-1980. The study draws upon a comprehensive series of interrelated studies at a single predominantly white institution and emphasizes the value of cross validation studies and the development of trend data through a program of research.

A Comparison of Black and White Student Backgrounds and Perceptions of a Predominantly White Campus Environment: Implications for Institutional Research and Program Development

During the last two decades a dramatic increase has taken place in black enrollments in higher education to the point where, in 1978, blacks accounted for 9.3% and 14.9% of the total higher education enrollment in the United States and the South, respectively. Approximately sixty percent of blacks in the South were enrolled at predominantly white institutions (Mingle, 1980). Such increases are likely to continue given the efforts of the federal government, state systems of higher education, and individual institutions to attract and retain minority students, thus necessitating better understandings of how the backgrounds, value systems, interests, and needs of black students attending predominantly white institutions differ from their white student counterparts (Peterson, et al, 1978; Jones, 1979). Accordingly, as Scott (1975) has noted, "the issue of black participation in white institutions of higher learning is still with us. Now, however, the basic question is not so much whether blacks should participate but how and under what conditions should they enter and participate in predominantly white institutions."

The purposes of this study are (1) to determine the primary dimensions where differences may exist between black and white undergraduate student backgrounds and perceptions of a predominantly white university prior to enrollment, while students are enrolled and within one year after receipt of a baccalaureate degree; and (2) to examine the implications which apparent differences in black and white student perceptions of the environment and college outcomes have for institutional research and student program development.

This study is related to previous studies (Pratt, Smith, Reichard, and Uhl, 1977; and Reichard and Uhl, 1979) in that it examines comparative reasons why black and white students select a college and university as well as reactions of black students to their experience in a traditionally white institution (Willie and Sakuma, 1972; Boyd, 1974, and Jones, 1979). However, this study, like the study of Peterson, et al (1978) also examines the comparative perceptions of black and white students to their collegiate experience in traditionally white institutions and extends such research further by examining the comparative post-graduation reflections of black and white students.

The study differs from previous investigations in that it draws upon a comprehensive program of interrelated students identifying significantly different backgrounds as well as pre and post-graduation perceptions of black and white students at a single predominantly white institution. The approach taken in this study emphasizes the value of cross validation studies and the development of trend data through a program of research. To the extent that the analyses of differential student backgrounds and perceptions of the college environment are translated into an understanding of the special needs of both black and white students, the study may assist institutions in facilitating individual student growth and development and increasing student retention, a primary concern for all institutions of higher education during a period of relatively stable and/or declining enrollment.

METHODOLOGY AND DATA SOURCES

All data were collected between 1978 and 1980 from students at the University of North Carolina at Greensboro (UNC-G), a public university

Figure 1

Data Sources and Sample Sizes for the Study of Differences in Black and White Student Perceptions of The University of North Carolina at Greensboro

	Entering Freshmen			Enrolled Students	Alumni	
Year	1978	1979	1980	1979	1977	1979
Data Source	SDQ	SDQ	SDQ	Student Perception Survey	Follow-Up Survey	Follow-Up Survey
# of Comparable Items included in analysis	49	49	49	78	42	42
Sample:						
Black	149	136	152	148	23	30
White	787	821	855	506	483	633
Data Source	Entering Student Survey Program					
# of Comparable Items included in analysis	14	14	14			
Sample:						
Black	33	40	41			
White	882	892	913			
Data Source	Freshman Market Survey Analysis					
# of Items		12				
Sample:						
Black		70				
White		800				

with an enrollment of approximately 7000 undergraduates and 3000 graduate students. Approximately 70% of the total university enrollment is female. Differences between the black and white student backgrounds, characteristics, and attitudes were examined at three points in time: prior to enrollment, while enrolled, and within one year after receipt of a baccalaureate degree.

The differences between black and white student characteristics prior to entry were examined via three data sources: (1) merged responses to the Student Descriptive Questionnaire (SDQ) developed by the Educational Testing Service for Fall 1978, 1979, and 1980 enrolled applicants (N=437 blacks, 2463 whites). The SDQ contains data for admitted and enrolled; accepted, no show; rejected; and prospective applicant groups (Reichard and Uhl, 1979). However, for the purposes of these analyses, only the responses of the enrolled student applicant group were analyzed. Students completed the SDQ at the time they registered to take the Scholastic Aptitude Test (SAT) during their junior and senior years of high school; (2) merged responses to locally formulated comparable items extracted from UNC-G's annual Fall 1978, Fall 1979, and Fall 1980 Entering Student Survey Programs (N=114 blacks, 2687 whites); and (3) items from a market survey analysis study of Fall 1979 entering freshmen (N=70 blacks, 800 whites). The data sources and sample sizes of black and white respondent populations are displayed in Figure 1.

Enrolled student perceptions and backgrounds for blacks and whites were compared from responses to the Student Perceptions Survey (SPS) which was administered in the Spring 1979 to a stratified random sample of white undergraduate students and to all black undergraduate students at UNC-G. Approximately 41% of the white students (N=506) and 24% of the black students (N=148) responded to the survey. The SPS incorporated items from Pace's (1975)

Higher Education Measurement and Evaluation Kit (Reichard, et al, 1981) and from a survey of black students enrolled in white colleges and universities sponsored by the Southern Regional Education Board (Jones, 1979).

Differences in black and white alumni responses and characteristics were compared from merged responses to identical items posed to Spring 1977 and Spring 1979 UNC-G undergraduate degree recipients less than one year after graduation. Approximately 56% (N=53) of black alumni and 65% (N=601) of white alumni responded to these follow-up surveys.

In order to provide more meaningful statistical comparisons, the number of black and white students in each analyses were equalized. The equalization in the sample sizes were performed by a weighting factor procedure which is part of the Statistical Package for the Social Sciences (SPSS) computer package (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). Differences between black and white student responses were analyzed by multivariate (discriminant) analyses and chi-squares when appropriate via the SPSS computer package. Multivariate analyses were conducted due to the fact that univariate analyses assume independent relationships between the variables and would distort the true interpretations of black and white differences. As Cohen and Cohen (1975, p. 433) state: "Doing a series of k F tests among the g sample means is unsatisfactory because the inevitable correlations among the variables render such tests nonindependent and create difficulties in statistical inference. The discriminant analysis solution is to treat the k X variables jointly and analytically by solving for a set of k weights, which produce a linear composite that maximally discriminates between the groups, that is, by a linear discriminant function of the variables." By so doing, one is able to identify the

relative significance of a number of variables which separate the black and white responses and characteristics. Discriminant and chi square analyses were employed in each phase of the study on the following a priori groupings of variables.

Phase	Variable Groupings	
I. Prior to Entry	Background Characteristics	Academic/Career Expectations
	Special Needs	Personal Attitudes/Orientations/ Motivations
	High School Activities	
	Anticipated College Activities	College Selection Factors
	Self-Assessment of Ability Areas	
II. Enrolled Students	Background Characteristics	Notable Experiences
	Reasons for Enrolling	Satisfaction with Major and College
	Use of Student Services	
	Perceptions of College Environment	Black-White Student Relationships
	Perceptions of Educational Benefits	
III. Recent Graduates	Background Characteristics	Satisfaction with Major/ Institution
	Employment Characteristics and Conditions	

RESULTS

Prior to Entry

Differences between black and white characteristics and perceptions are discussed separately for each phase of the analyses and for each a priori grouping of variables. The first results to be considered are the differences between black and white students prior to entry.

Significant differences ($\Lambda = .63$; $\chi^2 = 137.6$; $p < .001$) were found between black and white students with regard to background characteristics. Standardized discriminant weights for the background characteristics items are presented in Table 1. As indicated, the SAT scores and the number of high school awards were the most important variables in separating black and white students. White

students tended to have higher SAT scores and fewer high school awards. Approximately 37% of the variability between the races could be explained by the set of background items. Significant differences were also found between black and white students in their actual first-year living accomodations ($\chi^2 = 36.6$; $p < .001$) and their preferred types of housing in their first two years of college ($\chi^2 = 38.7$; $p < .001$). A greater percentage of white students indicated that they were actually living with their parents during their first semester of college and preferred to do so more than black students who preferred to live in the residence halls. Moreover, the estimated family income of white students was found to be significantly higher ($\chi^2 = 49.75$; $p < .001$) than the estimated family income for black students.

In the analysis of the student's special needs or assistance outside of regular course work, significant differences ($\Lambda = .90$; $\chi^2 = 97.8$; $p < .001$) were identified between the races. The results of the discriminant analysis on the special needs items are presented in Table 2. Here, notable differences were observed for SDQ items 44D, C, and G, suggesting that blacks had greater need for special assistance in the areas of finding part-time work, improving their mathematical ability, and developing good study habits.

The high school activities and anticipated college activities of black and white students were also found to be significantly different. With regard to high school activities ($\Lambda = .85$; $\chi^2 = 145.5$; $p < .001$), black students tended to be more involved in ethnic/racial activities and student government while white students (see Table 3) tended to be more involved in art, music, dance, and religious activities or organizations. Table 3 also indicates nearly similar patterns of actual high school activity and anticipated interest in related college activities for black and white students ($\Lambda = .82$; $\chi^2 = 175.7$; $p < .001$).

Table 1

Discriminant Analysis Results on Background Characteristics Items for Black and White Students Prior to Entry

Item	Standardized Discriminant Weights
SDQ 2 Type of High School (Public/Private)	- .11
SDQ 3 Type of High School Program	- .07
SDQ 4 Size of High School Class	.02
SDQ 5 High School Class Rank	- .11
SDQ 19 Hours Worked in Part-time Job	.10
SDQ 23 High School Awards/Honors	- .29
L.O. 2 Anticipated full/part-time Work in College	- .11
L.O. 3 Father's Education	.15
L.O. 4 Mother's Education	- .02
L.O. 5 Racial Composition of High School	.13
SAT-Verbal	.51
SAT-Math	.58
	Group Centroids
White	.77
Black	- .75
Canonical Correlation	.608

Table 2

Discriminant Analysis Results on Special Needs Items
for Black and White Students Prior to Entry

Item		Standardized Discriminant Weights
SDQ 44	Desired Assistance Outside of Regular Coursework:	
A.	Counseling about Educational Plans/Opportunities	.02
B.	Counseling about Vocational/Career Plans/Opportunities	.16
C.	Improving Mathematical Ability	-.59
D.	Finding Part-time Work	-.71
E.	Counseling about Personal Problems	-.00
F.	Increasing Reading Ability	-.05
G.	Developing Good Study Habits	-.25
H.	Improving Writing Ability	.00

	Group Centroids
White	.34
Black	- .34
Canonical Correlation	.32

Table 3

Discriminant Analysis Results on High School Activity and Accepted College Activity Items for Black and White Students Prior to Entry

Item	Standardized Discriminant Weights	
SDQ 45 Type of High School Activity SDQ 46 Type of Anticipated College Activity	High School Activity	Anticipated College Activity
A. Athletics	- .09	-.05
B. Ethnic/Racial Activities	.75	.81
C. Journalism/Debating/Drama	- .22	-.25
D. Art/Music/Dance	- .31	-.11
E. Pre-Professional/Departmental Clubs	.17	.05
F. Religious Activities	- .30	-.34
G. Social/Commuting Organizations	- .11	-.17
H. Student Government	.44	.51
	Group Centroids	
White	- .42	-.47
Black	.42	.47
Canonical Correlation	.39	.42

One exception was a slight decline from high school to college in anticipated art, music, and dance activities for white students.

Several items on the SDQ ask the student to rate themselves in comparison to other people their own age on a variety of ability areas. The discriminant analysis of the self-assessment of ability items revealed significant differences (Λ=.88;χ^2=109.7; $p < .001$) in the responses by race. Table 4 presents the standardized discriminant weights for these items. In general, white students indicated higher self-assessments of abilities in the areas of mathematics, art, science, creative writing, music, and mechanics, while black students indicated a higher self-assessment of abilities with regard to getting along with others and in written expression.

Prior to entering the university, significant differences were noted in a number of areas with regard to the academic and career expectations of black and white students. Chi square tests of the highest level of education students planned to complete ($\chi^2 = 34.4$; $p < .001$) and student plans to complete a degree at UNC-G (χ^2=13.7; $p < .01$) revealed that black students, in general, planned to obtain a higher level of education than their white counterparts and that they expected to be continuously enrolled at the university. On the other hand, a noticeably larger percentage of white students indicated that they were undecided upon their anticipated highest degree and that they expect to transfer to another institution. Significant differences were also found in the year in which students expected to seek career planning assistance (χ^2=14.9; $p < .01$). White students anticipated seeking career planning assistance much later in their college life than black students. This may suggest that black students are more vocationally oriented than white students. No significant differences were found in the

Table 4

Discriminant Analysis Results on Self-Assessment of Ability Items for Black and White Students Prior to Entry

Item	Standardized Discriminant Weights
SDQ 47 Acting Ability	.14
SDQ 48 Artistic Ability	-.33
SDQ 49 Athletic Ability	-.01
SDQ 50 Creative Writing	-.31
SDQ 51 Getting Along with Others	.58
SDQ 52 Leadership Ability	.12
SDQ 53 Mathematical Ability	-.33
SDQ 54 Mechanical Ability	-.26
SDQ 55 Musical Ability	-.29
SDQ 56 Organizing Work	-.01
SDQ 57 Sales Ability	.06
SDQ 58 Scientific Ability	-.32
SDQ 59 Spoken Expression	-.14
SDQ 60 Written Expression	.28
	Group Centroid
White	.37
Black	-.37
Canonical Correlation	.35

students' present feelings of satisfaction with their career directions, the perceived relationship between their major and career, or their part/full-time attendance at college.

A multivariate analysis was next conducted on personal attitudes, orientations and motivational items derived from the Entering Student Survey Program. Here, no significant differences were found between the races on items dealing with the students political point of view, attitudes towards fraternities and sororities, possible expansion of the intercollegiate athletic program, the Myers-Briggs Type Indicator (MBTI) scores, or important outcome goals with regard to professional development, intellectual, social, aesthetic and cultural, educational and ethical growth. The only significant difference between blacks and whites ($\chi^2=17.81$; $p < .001$) with regard to preference for a variety of campus activities was the types of athletic activity in which the students expected to participate while in college. In general, black students expected to participate in more planned athletic activities such as club sports and intramurals, while white students preferred more informal and individual types of athletic activities.

Analyses of the college selection patterns for black and white students revealed no significant difference in reasons for choosing to enroll at UNC-G or whether or not UNC-G was the first, second, or third choice among other institutions to which a student may have applied. No difference was apparent with regard to the decision to declare a major or the type of major declared. The sources where the students first learned about the university, sources which most influenced their decision to enroll at the university, and reasons for declining admission to other universities also revealed no

differences between blacks and whites. Significant differences were found between the races, however, in items related to applying for financial aid at the university (χ^2=45.70; p <.001) and whether financial aid was offered at the university (χ^2=28.31; p <.001). The percentage of black students applying and receiving financial aid (79%) was approximately double the percentage for white students (42%). Differences were also noted in the types of financial aid being received. A significantly larger percentage of black students were receiving grants, loans, and work-study aid. No differences exists however in the percentage of black and white students receiving scholarships.

Enrolled Students

Differing perceptions of enrolled undergraduate students held by blacks and whites were explored by the Student Perception Survey (SPS) which was administered during the Spring 1979 semester to a stratified random sample of currently enrolled white students and to all currently enrolled black students. The SPS consists of items measuring the students: (a) background characteristics; (b) reasons for enrolling at the university; (c) use of student services; (d) perceptions of college environment; (e) perceptions of educational benefits; (f) notable experience at the college; (g) satisfaction with major and college; and (h) characteristics of black-white relationships.

The same analyses employed in the Prior to Entry phase were employed for the Currently Enrolled phase of the analysis. The first area analyzed from the SPS was the background characteristics of the students. Here, significant differences (Λ= 225;χ^2=294.3; p <.001) were found between the races. The results of the discriminant analyses for these items are presented in Table 5. As indicated, the set of items were very effective (R^2=.77) in separating the two races. The two most important items in discriminating among the groups

Table 5

Discriminant Analysis Results on Background Characteristics Items
For Currently Enrolled Black and White Students

Item		Standardized Discriminant Weights
SPS 7	Receiving Financial Aid	.22
SPS 8	Number of Hours Working in Part-Full-time Jobs	-.14
SPS 9	Highest Anticipated Level of Education	.07
SPS 13	Mother's Education	.21
SPS 14	Father's Education	-.29
SPS 15	Racial Composition of Neighborhood During High School	-.86
	SAT-Verbal	-.18
	SAT-Math	-.14
	Grade Point Average	-.26

	Group Centroids
White	-1.84
Black	1.84
Canonical Correlation	.88

were those dealing with the racial composition of their neighborhood while in high school and the highest level of education obtained by the father. Not surprisingly, black students tended to come from predominantly black neighborhoods. As was found for students in the prior to entry phase, fathers of currently enrolled black students tended to have lower levels of education than fathers of white students.

Other significant differences were found among the background characteristics of currently enrolled white and black students. Such differences included the present living accomodations ($\chi^2=28.2$; $p< .001$); entering admissions classification ($\chi^2=21.7$; $p < .001$) father's occupation ($\chi^2=61.8$; $p < .001$); mother's education ($\chi^2=40.8$; $p < .001$) and marital status ($\chi^2=13.9$; $p < .001$). In general, more black students were single, tended to live in the dorm, enter under the special services program, had parents working in unskilled, semi-skilled, skilled or service area occupations.

Unlike the results from the Prior to Entry analyses, significant differences ($\Lambda =.67$; $\chi^2=31.1$; $p< .01$) were found between the races on their reasons for enrolling at UNC-G The reasons for enrolling at UNC-G in this phase of the analysis reflected a non-marketing orientation. As demonstrated in Table 6, several items were important in separating the black and white responses. Most noteworthy was the tendency for white students to indicate parental encouragement to attend UNC-G and that the presence of black faculty, friends enrolling at the university and the reputation of the university were important factors for selecting and enrolling at UNC-G. Black students on the other hand, tended to report such factors as cultural diversity, the influence of admissions representatives, better financial aid

Table 6

Discriminant Analysis of Reasons for Enrolling at the University for Currently Enrolled Black and White Students

Item			Standardized Discriminant Weights
SPS 21	A.	Good Reputation of University	.36
SPS 21	B.	Good Reputation of Department or School	.02
SPS 21	C.	Parental Encouragement to Attend University	.78
SPS 21	D.	Influence of Admissions Representative	-.54
SPS 21	E.	Friends Were Enrolling at University	.39
SPS 21	F.	Enough Students of Race to Feel Comfortable	.13
SPS 21	G.	Encouragement of University Students of Own Race to Attend	-.31
SPS 21	H.	Encouragement of University Students Not of Own Race to Attend	-.12
SPS 21	I.	Enough Students Not of Own Race to Expand Experience and Unique Overall Education	-.77
SPS 21	J.	Presence of Black Family	.68
SPS 21	K.	Financial Aid Was Better Than the Predominantly White Institutions	.11
SPS 21	L.	Financial Aid Was Better than Other Predominantly Black Institutions	-.38

	Group Centroids
White	.69
Black	-.69
Canonical Correlation	.57

offerings than at predominantly black institutions, and the encouragement of black university students as being important in their decision to enroll at the university.

Multivariate analyses of the utilization of student services identified significant differences (Λ=.65; χ^2=11.93; $p < .001$) between the races. The standardized discriminant weights for the utilization of student services items are presented in Table 7. Consistent with the previous results, black students tend to utilize the offices of Special Services and Student Financial Aid more often than white students. Again, the utilization of student services items were effective (R^2=.35) in separating the two groups.

The next significant difference (Λ=77; χ^2=60.1; $p < .001$) found in the responses between enrolled black and white students had to do with items dealing with the perceptions of the college environment. The results of the discriminant analyses are presented in Table 8. Here, black students typically assigned greater importance to social activities in evaluating their university experience, generally felt that students seem to expect other people to adapt to them rather than trying to adapt themselves to others, and were more inclined to indicate that most courses were a real intellectual challenge. White students on the other hand tended to devote more hours to organized extracurricular activities, felt professors went out of their way to help them and felt that professors provided helpful academic advice.

No significant differences were found between black and white student responses to items dealing with perceptions of the educational benefits of college (Λ=.89;χ^2=30.3), satisfaction with major and college (Λ=.94;χ^2=16.4), or notable experiences at the university. Although responses to the educational benefits and satisfaction with major and college items were defined as being not significant ($p < .01$), they did approach significance ($p < .05$).

Table 7

Discriminant Analysis Results for Utilization of Student Services Items for Currently Enrolled Black and White Students

Item	Standardized Discriminant Weights
SPS 22 A. Career Planning and Placement	-.05
SPS 22 B. Commuting Student Services	-.06
SPS 22 C. Academic Advising	-.01
SPS 22 D. Counseling and Testing Center	-.11
SPS 22 E. Special Services Project	.44
SPS 22 F. Student Health Center	.14
SPS 22 G. Office of Adult Students	-.07
SPS 22 H. Office of Student Financial Aid	.81
	Group Centroids
White	-.73
Black	.73
Canonical Correlation	.59

Table 8

Discriminant Analysis Results of Perception of College Environment Items for Currently Enrolled Black and White Students

Item		Standardized Discriminant Weights
SPS 16	Hours Devoted to Organized Extracurricular Activities	-.27
SPS 17	Involvement in Student Government Activities	-.20
SPS 27	Importance of Social Activities in Evaluating University Experience	.32
SPS 28	Reputation of University's Social Activities	-.14
SPS 33	College Environment Item (True/False):	
A.	Feeling of Being An Integral Part of University Community	-.15
B.	Knowing Right University People Can Get You a Better Break	-.01
C.	Professors Go Out of Their Way to Help You	-.81
D.	There is a Lot of Group Spirit	.07
E.	Faculty are not Interested in Students Personal Problems	-.17
F.	School Helps Everyone get Acquainted	.22
G.	Channels for Expressing Students' Complaints are Widely Accessible	-.03
H.	Students Seem to Expect Other People to Adapt to Them	.23
I.	Most Professors are very Thorough Teachers	-.07
J.	Students Set High Standards of Achievement for Themselves	.21
K.	Most Courses are a Real Intellectual Challenge	.23
L.	School has a Reputation for Being Friendly	.03
M.	Standards set by Professors are not Hard to Achieve	.22
N.	Faculty Members Provide Helpful Career Advise	.05
O.	Faculty Members Provide Helpful Academic Program Planning Advise	-.29
		Group Centroids
White		.53
Black		-.55
Canonical Correlation		.48

Finally, as noted in Table 9, significant differences (Λ =.41; χ^2=226.8; p<.01) between the races were observed in responses to items dealing with black-white student relationships. The items were particularly effective (R^2=.59) in separating the black and white responses. The most important item (SPS 32H) dealt with the need for a black student organization to further the understanding of the culture, social and political achievements of black people; black students strongly endorsed this idea. The enrolled black students also reported a greater incidence of situations where they were made aware of their race, and agreement with the statement that interracial dating is an accepted social relationship on campus.

Recent Graduates

The last phase of the analyses concentrated on identifying differences in black and white responses to follow-up surveys of recent undergraduate degree recipients. The items from the survey were grouped into three categories for analyses: background characteristics, employment characteristics, and satisfaction with major and institution.

Significant differences (Λ=.79; χ^2=23.15; p <.001) were identified in background characteristics for black and white graduates as shown in Table 10. The major variables separating the two groups were the grade point average and marital status of the students. In general, white students graduated with higher GPA's and a higher percentage married sooner after graduation than black students.

No significant differences were found between black and white responses to employment characteristics and conditions (Λ =.87; χ^2=6.49) or satisfaction with major/institution (Λ=.92;χ^2=3.88) items. Among the employment characteristics investigated were: current primary activity/employment, sources

Table 9

Discriminant Analysis Results of Black White Student Relationship Items for Currently Enrolled Black and White Students

Item		Standardized Discriminant Weights
SPS 34A	Sensitivity of counseling & advising service needs of minority students	-.06
SPS 34B	Institutional effort to recruit minority students	.03
SPS 34C	Friendly relationships between black & white students	-.10
SPS 34D	Freedom of social tension in campus community	.15
SPS 34E	Social background or community interest likely to define friendship	.02
SPS 34F	Interracial dating is an accepted social relationship on campus	-.27
SPS 34G	Social contacts include both white and black students	-.24
SPS 34H	Frequency of experiencing situations on campus where made conscious of race	-.41
SPS 34I	Limitation of campus activities to one's race	.41
SPS 34J	Diversity among black students in their interests, social group, and activities	-.16
SPS 34K	Recognition by all students of black students who are leaders on campus	.14
SPS 34L	Black and white student leaders work well together	.19
SPS 34M	Strong belief in racial integration since coming to campus	.01
SPS 32A	Necessity of remedial courses to insure academic success of disadvantaged students	-.09
SPS 32B	Necessity of tutorial aid to insure academic success of disadvantaged students	.08
SPS 32C	Necessity of black student organizations to further understanding of cultural, social and political achievements of blacks	-.74
SPS 32D	Necessity of special office to handle special problems/ needs of minority students	-.17

	Group Centroids
White	1.18
Black	-1.21
Canonical Correlation	.77

Table 10

Discriminant Analysis Results of Background Characteristics Items for Black and White Undergraduate Degree Recipients

Item	Standardized Discriminant Weights
Age	.24
Sex	.21
Marital Status	.29
Grade Point Average	.95
In-Out of State Residency	-.23
Certified as a Public School Teacher	.17
	Group Centroids
White	.51
Black	-.52
Canonical Correlation	.46

used in obtaining employment, type of industry employed, length of time in securing job, problems in finding jobs, current annual income, relationship between present job and major, reasons for being employed outside of major, future highest degree expected, perception of being underemployed, present enrollment in a college or university, type of degree being sought, current field of study if continuing formal education, length of unemployment, reasons for not seeking employment if unemployed, expectation of being employed and reasons for going to college.

As previously stated, no significant differences were found in the black and white student satisfaction with their major and institution. The satisfaction items utilized in the analysis related to such topics as satisfaction with present employment, overall quality of instruction, quality of instruction in major/program, comparison of education received with similar graduates of other institutions, willingness to choose the same major/institution again and value of attending college.

DISCUSSION

Implications for Student Development

This study identified a number of important differences between black and white students prior to entering the university, while currently enrolled at the University, and one year after receipt of a baccalaureate degree. A summary of these differences may be found in Table 11. The substantive findings which emerge from the comparative analysis of black and white student backgrounds and perceptions of the UNC-G environment suggest a number of implications for student development.

A major difference between black and white students, which was consistent across the students' college experiences, was the need for financial assistance on the part of most black students. As the background

Table 11

Summary of Important Differences Between Black and White Students
Prior to Entry, For Currently Enrolled Students and Recent Graduates

Prior to Entry	White	Black
Family income	Higher	Lower
Need to find part-time work	Lower	Higher
Applying and receiving financial aid	Lower	Higher
SAT scores	Higher	Lower
Math ability	Higher	Lower
Need to improve math	Lower	Higher
Creative writing	Higher	Lower
Highest degree expected	Lower	Higher
High school awards/honors	Lower	Higher
Getting along with others	Lower	Higher
Participation in group athletics	Lower	Higher
Student government activities	Lower	Higher
Ethnic/social activities	Lower	Higher
Religious activities	Higher	Lower
First year housing preference	With parents	In dorm
Enrolled Students		
Important reasons for enrolling at university:		
Parential encouragement to attend	Higher	Lower
Influence of admissions representative	Lower	Higher
Friends enrolling at UNC-G	Higher	Lower
Reputation of university	Higher	Lower
Presence of Black faculty	Higher	Lower
Expand cross-cultural experience	Lower	Higher
Offered better financial aid package	Lower	Higher
Father's education	Higher	Lower
Father's occupation	Skilled/ Professional	Semi-Skilled/ Service
Racial composition of neighborhood	Primarily white	More integrated
Use of financial aid office	Lower	Higher
Use of Special Services office	Lower	Higher
Helpfulness of professor	Higher	Lower
Experiences made conscious of race	Lower	Higher
Need for black student organization	Lower	Higher
Devotion to extracurricular activities	Higher	Lower
Importance of social activities	Lower	Higher
Recent Graduates		
GPA	Higher	Lower
Percentage married	Higher	Lower
Percentage employed full-time	No difference	No difference
Percentage continuing education	No difference	No difference
Sources used in obtaining employment	No difference	No difference
Type of industry in which employed	No difference	No difference
Length of time in securing job	No difference	No difference
Current annual income	No difference	No difference
Satisfaction with major	No difference	No difference
Satisfaction with institution	No difference	No difference

characteristics indicated, blacks typically came from families with lower economic incomes who were living in an integrated or predominantly black neighborhoods. Under these conditions, financial aid became an extremely important factor in black students' decisions to enroll at UNC-G. In this regard, the single greatest student service need noted by blacks was the provision of assistance in finding part-time work, suggesting that summer job centers and job location centers would be particularly helpful in attracting and retaining minority students. Talk of proposed budget cutbacks in the student aid program and summer job or job location centers being given current consideration by state and federal governments sounds ominous indeed in that such developments could dramatically influence college participation rates of minority students in an adverse manner.

Another difference, which was consistent across the three time periods, was the academic aptitude and achievement of the students. Black students generally scored lower on the SAT and saw themselves as deficient and in need of improving their math abilities. This difference in academic aptitude and achievement remained throughout the college years as evidenced by the difference in the GPA for graduating seniors. Although several explanations are possible for the continued discrepancy in academic achievement, the need to improve mathematical abilities and develop improved study habits are seen as particularly critical by black students. Progress in these areas should help to increase student retention rates, a primary concern for all institutions of higher education during a period of relatively stable and/or declining enrollments.

The third major difference was related to the students social interests and activities. Here, blacks were much more interested than whites in participating in student government and activities of special ethnic or racial clubs such as the Neo-Black Society. The need for black student

organizations to further the understanding of cultural, social, and political achievement of blacks was seen as essential by blacks. Furthermore, blacks were more likely to see social activities as important in evaluating their university experience. They also tend to be more interested in group or team rather than individualized sport activities. Thus, it would appear that there is a real need to recognize different interests of black students as they enter the university.

The above results document the need for the development of a supportive environment for minority students. This is readily apparent in that the portrait of a minority student which emerges is that of a risk-taker who enters into campus life with concerns about his or her academic preparation but relatively little support and understanding of the nature of the college experience. College is an unfamiliar experience due to the fact only thirty-five percent of blacks compared to sixty-three percent of whites have fathers who have attended some college as well as the fact that whites received significantly greater parental encouragement to attend UNC-G than did blacks. Similarly, whites were more likely than blacks to have friends who were enrolled at the university who could constitute a support group. The fact that black students reported a significantly greater number of experiences in which they were made conscious of their race and felt a strong need for a black student organization suggests that more needs to be done if black students are to see themselves as integrally involved in the social and academic aspects of the university community. Faculty could be most influential in this process. However, the present perception as revealed by this and other studies (Reichard, et al, 1981; p. 95) in both traditionally black and traditionally white institutions, is that black students are more

likely to feel that professors do not go out of their way to help them. The whole area of faculty-black student interaction needs more attention.

Finally, the fact that no major differences were found in the employment characteristics of black and white graduates suggests that blacks are being integrated more fully in a pluralistic society. Another potentially encouraging sign is that many of the substantial differences between blacks and whites which appeared prior to entry and while enrolled seem to have been moderated shortly after graduation. Most important in this regard was the increased satisfaction with the major or institution held by recent black graduates compared to currently enrolled black students. Although no significant differences were noted between currently enrolled black and white students or black and white students after graduation, the percentages of black and white students expressing satisfaction with UNC-G were substantially greater for the latter group.

In a separate but related study of UNC-G students, Sutton, Uhl, and Reichard (1979) found that the percentage of blacks and whites who would choose to attend UNC-G again increased substantially within a short period after graduation. The percentage of black seniors who would attend UNC-G was 44% compared to 86% of the black students six to nine months after graduation. For white seniors and recent graduates, the percentages of students who would choose to attend UNC-G again were 72 and 80 percent, respectively. The notable post-graduation increases in satisfaction with institution, regardless of race, suggest that researchers may do well to take such institutional and environmental factors into account when assessing student satisfactions.

Implications for Institutional Research

The study reported herein has attempted to synthesize findings from a number of student oriented studies conducted by a single institution. However, the primary objective of the study and related studies -- understanding the backgrounds and perceptions of students prior to entry, at point of entry, while in process, immediately prior to graduation, and within a year after graduation -- is shared by most offices of institutional research.

If race is to be an important variable in the analyses of data from such studies, it is apparent that a well-planned program of research rather than a series of independent studies will be necessary due to the inter-relationship of the variables and problems associated with developing a large enough pool of minority respondents to permit multivariate analyses by race. Thus, researchers should bear in mind the probable need to merge data sets over a period of time and the concomitant requirement of posing questions in a consistent format. An item pool approach to the construction of surveys may be helpful in assuring consistency as opposed to the more common tendency to construct surveys from scratch without regard to the manner in which similar items were posed in previous years.

A continuing dilemma exists on whether to ask the same question each year. The dilemma centers upon the desirability of merging data sets to permit the analyses of responses for minority or other sub-populations of interest or formulating new "second or third generation questions" which may be more sensitive to the particular question being investigated. Similarly, the need for continuity in posing similar questions on a year to year basis in order to develop trend data is often countered by pressures from state governing or coordinating boards to pose questions of their own

choosing in interinstitutional surveys which may not mesh with the programmatic research efforts of individual constituent institutions within a multi-campus setting. Regardless of whether or not locally devised items are included in an institution's surveys from one year to the next, institutional researchers need to interpret their findings in a broader context than a single institution (Reichard, 1980). One means for accomplishing this end is placing greater reliance upon the conduct of interinstitutional research.

The Institute on Desegregation at North Carolina Central University (Smith, 1980) has emerged as an important vehicle in the promotion and sharing of interinstitutional research. The existence of five traditionally black and eleven traditionally white publicly supported institutions within North Carolina has contributed to the vitality of research in this area on a voluntary basis, apart from the continuing controversies with HEW's Office for Civil Rights.

Another means for broadening the context in which institutional research is interpreted is by placing greater reliance upon the use of standardized instruments, thus providing additional national or institutional data reference points as well as several developing literature bases against which to contrast a single institution's findings. Thus, if questions are based on the more broadly based higher education research or in theory rather than institutional pragmatics, the possibility of gaining faculty involvement, acceptance and credibility for institutional research projects may be greatly enhanced.

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